one of mass medium programming [or] and said data associated with said instruct signal; and

transmitting to [a] said at least one receiver station said at least one [a] control signal to cause said at least one receiver station to tune to one of a broadcast [or] and cablecast transmission containing said [a specific] instruct signal.

27. (Amended) The method of claim 21, wherein said at least one [or more] control signal[s] further comprise downloadable executable code targeted to said processor [at] of said at least one [or more] of said plurality of receiver stations, said downloadable executable code programming one of a [the] way [or] and method in which said [at least one] processor responds to said instruct signal.

28. (Amended) The method of claim 21, wherein said at least one receiver station is one of adapted to detect [the presence of] said at least one control signal [or] and programmed to respond to said instruct signal based on a signal location in an information transmission, said method further comprising the step of causing at least [some] a portion of one of said at least one control signal [or] and said instruct signal to be transmitted in said signal location.

REMARKS

The Office Action dated January 8, 1997 has been carefully reviewed. In response thereto, claims 3, 4, and 7-28 have been amended. No new matter is added by the claim amendments or the new claims.

Claims 3-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Applicants have amended the pending claims in response to various of the examiner's objections and queries. Applicants believe that all pending claims clearly define the metes and bounds of the claimed subject matter, and are supported by an adequate written description that is fully enabling. Applicants respectfully submit that this rejection is traversed by the amendment which clarifies the claims in response to the Examiner's specific objections. The office action states that the "examiner is not certain that the metes and bounds of these claims can be determined because of the language in the disclosure and claims." Applicants traverse this rejection and submit they are under no duty to prospectively reference claim limitations to the specification where the Examiner has not specifically identified what is objected to as indefinite. MPEP § 2111 states that "[d]uring patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.'" Also, it is only "when the specification provides definitions for terms appearing in the claims that the specification can be used in interpreting claim language." MPEP § 2111.01. Applicants respectfully request that this blanket rejection for indefiniteness be withdrawn.

However, in order to advance the prosecution of the present application, Applicants shall provide a summary of the pertinent disclosure including citation to

examples supporting the claimed subject matter. The present application asserts priority on the disclosure of the '81 case, filed on November 3, 1981, as Ser. No. 317,510, and issued September 15, 1987, as U.S. Pat. No. 4,694,490. The specification is generally addressed to apparatus and methods for automatically controlling the transmission and presentation of information programming, including the application of embedded signalling for a number of functions, including the control over decryption and access, monitoring of usage/availability, control of external equipment, coordination of multiple broadcasts, automated compilation and collection of billing data, and generation and presentation of combined media presentations of broadcast and locally-generated user specific content. (Specification, Abstract; col. 3 line 29 to col. 5 line 27). The specification further discusses coordination and control of programming at several levels of the transmission chain, including transmission stations, intermediate transmission stations, and receiver stations.

Regarding the present application, independent claims 3, 4, 14, 18, and 21 are directed to a method of controlling a receiver station or a plurality of receiver stations in a network. (See, e.g., '490 Specification, col. 6 line 22 to col. 9 line 25 and col. 9 line 26 to col. 10 line 13)[1]. Applicants provide these specific embodiments in support of the pending claims as by way of example only. The claims must be read as broadly as is reasonable in light of the specification, and Applicants in no way intend that their submission of excerpts/examples be construed to unnecessarily bound the scope of the claimed subject matter. Applicants will provide additional specification support in

[1] See '87 Specification at pages 28-37, 37-324, and 37-328

their detailed response to the Examiner's specific rejections provided *infra*. The foregoing is intended to be exemplary only and in no way to limit the claimed invention to the cited passages.

Claims 13-20 and 24-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Applicants have made a good faith effort to amend the claims to overcome the rejections. Claims 13, 14, 18, 24, and 26 have been amended to alleviate the antecedent inconsistencies, therefore the withdrawal of the rejection of claims 13-20 and 24-26 is hereby respectfully requested.

The specification stands objected to under 35 U.S.C. § 112, first paragraph, as failing to provide an enabling disclosure. Specifically, it is questioned where, in the '87 disclosure, is there support for an operational embodiment using the established meaning of the terms "react, reaction, or instruct-to-react." For the reasons set forth in the objection to the specification, claims 7 and 16 are rejected under 35 U.S.C. § 112. first paragraph. As noted above, Applicants rely on the '81 case, App. Ser. No. 06/317,510, issued as U.S. Pat. No. 4,694,490 for priority. Nevertheless, Applicants will demonstrate disclosure with regard to the '87 case.

Applicants find no instances of the terms "react" and "instruct-to-react" in the claims. Thus, with regards to the terms "react" and "instruct-to-react," Applicants respectfully submit that the objection to the specification under 35 U.S.C. §112, first paragraph, and the rejection of claims 4 and 11 under 35 U.S.C. §112, first paragraph, be withdrawn.

The established meaning of the noun "reaction" is "response to a stimulus." *Webster's II New College Dictionary*, 1995. "Stimulus" is defined as

> "1. Something causing or viewed as causing a response. 2. An agent, action, or state that elicits or accelerates a physiological or psychological activity. 3. Something that incites or rouses to action." *Id.*.

At column 19, line 42-68, an operational embodiment is described wherein a station using the signal processor apparatus and methods of the present invention is equipped with a microcomputer that "is preprogrammed to respond in a predetermined fashion to instruction signals embedded in" a programming transmission of "Wall Street Week." The preprogrammed response of the user station's microcomputer to the embedded signals is a "reaction," as per the term's established meaning.

Another instance of '81 specification support for the term "reaction" is found at column 18, line 43 to column 19, line 4. Therein is described a method for monitoring multiple programming channels and selecting programming and information in a predetermined fashion. In this example, a microprocessor of a station using the signal processor apparatus and methods of the present invention is programmed to hold a portfolio of stocks and to receive news about these stocks. News is transmitted on different channels to a converter box and a signal processor of the user station. Each news transmission is preceded with a unique signal. In a predetermined fashion, the microcomputer instructs the signal processor to hold examples of unique signals that

are sought after and compare them with all of the incoming unique signals of the news transmissions. When the signal processor identifies a sought for unique signal via the comparison, it relays information of that signal to the microcomputer. Then, in a predetermined fashion, either the microcomputer or the signal processor instructs a tuner to set the converter box to the proper channel. The signal processor's relay of information to the microcomputer and the microcomputer's or signal processor's instruction to the tuner are each a "reaction," as per the term's established meaning.

Yet another instance of support in the '81 case for the term "reaction" is found beginning at column 20, line 11. Thereafter, a method for delivering programming is described in which a viewer of a television program on cooking techniques uses a station of the present invention to accept an offer for delivery of a recipe. Halfway through the program, a program host makes an offer of delivery of a recipe. The offer prompts the viewing user to employ a local input at the station to convey a signal that indicates acceptance of the offer. With the acceptance, the recipe is delivered to the user station. The pressing of buttons by the user is a reaction in response to, elicited by and incited by a stimulus that is the program host's offer. Accordingly, a "reaction" is disclosed.

Applicants respectfully submit that the specification adequately describes and fully enables the use of the term "reaction" in the claims as per its ordinary usage and that claims 4 and 11 are adequately described and fully enabled by the specification, and sufficiently definite to allow one of ordinary skill in the art to comprehend the bounds of the claimed subject matter. Applicants respectfully submit that, with respect

to the term "reaction," the objection to the specification, under 35 U.S.C. §112, first paragraph, and the rejection of claims 4 and 11 under 35 U.S.C. §112, first paragraph, be withdrawn.

It is questioned where, in the '81 disclosure, is there support for an operational embodiment using the established meaning of the terms coordinate or instruct-to-coordinate. The established meaning of the verb coordinate, as defined by *Webster's II New College Dictionary*, 1995, is, in transitive form, "1. To place in the same order, class, or rank. 2. To harmonize in a common effort," and, in intransitive form, "To work together harmoniously." In the '81 case, at column 19, line 30 to column 20, line 10, there is described "Co-ordinating Multimedia Presentations in Time" in which programming delivered at different times to a viewer can be coordinated to give a multimedia presentation at one time in one place. Therein, it is described that, at 4:30 PM, closing stock prices for the day are received by the viewer's microcomputer via a digital information channel. Stock prices that relate to stocks in a stored portfolio are recorded by the viewer's microcomputer. At 8:30 PM, the "Wall Street Week" programming transmission begins. Thus, the programming delivered at different times to one place is the closing price information of the viewer's stock and the "Wall Street Week" transmission. The programming transmission contains instruction signals that are transferred to the microcomputer. The instruction signals (instruct-to-generate signals) instruct the microcomputer to generate a graphic video overlay that represents what the stocks in the viewer's stored portfolio did in the past week. After the "Wall Street Week" host says, in the programming transmission, "here is what your portfolio

did," a whole multimedia presentation simultaneously comprised of a combination of the "Wall Street Week" transmission and the graphic video overlay is given at a TV set of the viewer. In order to coordinate the delivered programming to give the multimedia presentation, an instruction signal instructs the microcomputer to transmit the graphic video overlay for as long as it receives the same instruction signal. When the instruction signal is no longer received by the microcomputer, the microcomputer ceases transmitting the overlay to the TV set. Thus, the instruction signal coordinates the transmission of the overlay with the "Wall Street Week" programming transmission to give a multimedia presentation.

It is questioned where, in the '81 disclosure, is there support for the embedded signal representing executable code (claim 15). The established meaning of the adjective executable, as defined by *Webster's II New College Dictionary*, 1995, is, 7. Computer SCI. To run (a program or instruction). Claim 15 recites, "wherein one of said downloadable executable code and identification data relative to said downloadable executable code are embedded in a television signal. In the '81 case, column 16 lines 45-50, discloses embedding codes that identify the codes and that transfer instructions to other external equipment, i.e., to run a program or instruction. It is well understood to those of ordinary skill in the art that an embedded code that identifies and instructs equipment can be defined as executable code. Withdrawal of the objected to the specification under 35 U.S.C. § 112, first paragraph the rejection of claims 7 and 16 under 35 U.S.C. § 112. first paragraph is respectfully requested.

Claims 3-28 are rejected under 35 U.S.C. § 102(e) as being anticipated by USP 4,536,791 to Campbell (hereinafter Campbell '791). Applicants submit that the applied reference, Campbell '791 is not prior art, the Campbell '791 reference claims priority to a continuation of Ser. No. 348,937 filed November 27, 1981, which is a continuation-in-part (CIP) of Ser. No. 135,987 filed March 31, 1980. The disclosure of the former (the CIP application) is not prior art since the filling date is after that of the pending application. Also, the examiner has not demonstrated that the disclosure of the parent application, filed March 31, 1980, includes the matter which the examiner applied against the present application to negate patentability under 35 U.S.C 102 (e). Applicants submit that since the chain of applications includes a continuation-in-part, then the examiner may not apply the disclosure of the more recent patent while simultaneously relying on the filing date of the earlier, abandoned application that possibly does not contain the disclosure relied upon to negate patentability in the present application.

Applicants submit that since Campbell '791 is not considered prior art, the claims have been amended to overcome the 112 rejections only. Further, Applicants submit that Campbell '791 is not prior art, but assuming arguendo that the examiner meets the burden of proving Campbell '791 is a proper prior art reference, applicants then respectfully traverse the rejection of the claims. Applicants submit that the claims should be allowed because these methods are not disclosed, taught, suggested, or implied by Campbell '791. Campbell '791 teaches a head end station that includes a central data system utilizing a control computer which gathers data from a wide variety

of sources and formats the data for transmission on video frequency channels. The formatted data is then transmitted by communication link to a television program processor where it is incorporated into the vertical blanking intervals of video signals by a variety of television program sources. The head end unit then transmits the combined cable television and data signal to remote subscribers. Normally, the signals are then transmitted through a cable network to a plurality of subscribers. The signals are received by an addressable converter which then processes the data on line as determined by subscriber input for desired viewing on one or more television sets.

Regarding claims 3 and 4, the examiner cites, "col. 8 lines 65-68 and col. 9 lines 17-44, as disclosing "detecting a presence or absence of a broadcast signal... [and] selecting a cablecast signal for reception based on the step of detecting." Applicant's disagree with the examiner's assertion and submit that Campbell '791 fails to disclose applicant's claimed invention. Instead, Campbell '791, col. 9 lines 17-28, discloses receiving RF data loaded television signals at a tuner 106 of converter 40 and a conventional descrambler unit 116 which processes the scrambled base band video signal from the tuner 106 and sends a descrambled base band video to a text graphics generator. Campbell '791 fails to disclose selecting a cablecast signal for reception at a controlled receiver station based on said step of detecting the presence or absence of a broadcast signal transmitted from a remote station. Further, col. 9 lines 29-44, fails to disclose receiving a cablecast signal based on the step of selecting the cablecast signal for reception. Actually, Campbell '791, col. 9 lines 29-44 discloses sending the descrambled base band video to text graphics generator 118 to provide display

characters and graphic symbols that have been transmitted on the vertical interval. In fact, the "signals" that the examiner refers to in col. 9 lines 29-44 of Campbell '791 have already been received by converter and are being processed for transmission to subscribers. In contrast, applicants are claiming the receipt of a cablecast signal at a receiver station based on selecting the cablecast signal for possible reception which is further based on detecting the presence or absence of a broadcast signal transmitted from a remote station. In addition, Campbell '791 fails to anticipate the limitations of independent claim 4, since claims 3 and 4 were rejected using the same Campbell '791 interpretation and as stated above Campbell '791 fails to anticipate applicants' claimed invention.

Regarding claims 5-13, Campbell '791 fails to disclose the limitations in claims 5-13. As discussed, Campbell '791 does not anticipate independent claims 3 and 4 of the present application. Since claims 5, 10, and 13 are dependent upon claim 3, claims 6 and 11 are dependent upon claim 4, and claims 7-9 and 12 are dependent upon claims 3 or 4, Campbell '791 does not anticipate dependent claims 5-13.

Regarding claim 14-28, the examiner states, "claims 14-25 are clearly anticipated by Campbell et al, as set forth in the rejection to claims 3-13." Therefore, as so argued, Campbell '791 fails to anticipate claims 3-13 and further fails to anticipate claims 14-25 as well as claims 26-28 which are dependent on claim 21. Therefore, withdrawal of the rejection of claims 3-28 under 35 U.S.C. § 102(e) as being anticipated by Campbell '791 is respectfully requested.

Claims 3-28 are rejected under the judicially created doctrine of non-obvious non-statutory double patenting over the patented claims in U.S. Patents 4,694,490; 4,704,725; 4,965,414; and 5,109,414.

As an initial matter, the examiner's rejection of the present application under the Schneller double patenting theory based on Harvey U.S. Patents 4,694,490 and 4,704,725 is improper because the present application does not claim the benefit of those applications under 35 U.S.C. § 120. Thus, there could never have been a basis for claiming the present subject matter in those applications. Therefore, the rejection based on Harvey U.S. Patents 4,694,490 and 4,704,725 should be withdrawn.

Moreover, the PTO fails to specifically identify all claims from cited Harvey patents that cover specific claims in the present application. Rather, the Office Action references "representative claims" from patents and the present application. The Office Action does not cite specific elements from claims in a patent covering specific elements in claims in the application. In fact, the Office Action acknowledges that the patent claims and application claims are directed to different elements, but states that this "does not prohibit this rejection if there is common or interrelated subject matter recited." The Office Action then references Schneller in support of this erroneous statement, not supported by Schneller.

The claims in the present application are distinct from the claims in the Harvey patents. As previously mentioned, the Office Action states that the independent and distinct standard was the main factor in the Schneller court's determination that the double patenting rejection should be affirmed. The Office Action has misinterpreted

this phrase. This phrase means independent 'or' distinct. MPEP (6th ed.) § 802.01. The MPEP defines independent as meaning "that there is no disclosed relationship between the two or more subjects disclosed" and that they are not connected. The MPEP defines the term distinct as meaning that "two or more subjects disclosed are related . . . but are capable of separate manufacture, use, or sale as claimed . . . ." Two or more subjects cannot then be unrelated, independent, and also related, and thus distinct. Analyzing the PTO's cited representative claims referenced in the Office Action, the claims of the present application are clearly distinct from the claims in the patents and therefore the claims in the present application are patentable. Although not required, applicants will analyze the claims of the present application with respect to the designated representative claims of Harvey U.S. Patents 4,694,490 and 4,704,725.

Claim 14 of the present application is distinct from the first representative claim, claim 7 of U.S. Patent 4,694,490.

Patent 4,694,490, claim 7 claims a method of communicating television program material, said material including a video signal containing a television program and an instruct-to-overlay signal, to multiple receiver stations. The video signal is received and the instruct-to-overlay signal detected and processed by a computer. The computer generates and transmits its overlay video signals to a television receiver which presents a combined display of the television program and overlay video signals, said display being specific to a particular user.

Present application claim 14 is directed to the method of controlling at least one of a plurality of receiver stations each including a receiver, a signal detector, a processor, each plurality of receiver stations adapted to detect at least one control signal and programmed to process downloadable executable code.

Patent claim 7 does not cover present application claim 14. Patent claim 7 relates to instruct-to-overlay signals that are processed by a computer and received by a television receiver which presents a combined display of the instruct-to-overlay signal and a television program. Application claim 14 controlling a plurality of receiver stations each adapted to detect at least one control signal and programmed to process downloadable executable code. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

U.S. patent 4,694,490, claim 7	**Present application, claim 14 (Amended)**
In a method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay video signals, to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay video signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, and wherein a video signal containing a television program signal and	A method of controlling at least one of a plurality of receiver stations each including a receiver, a signal detector, a processor, each said plurality of receiver stations adapted to detect at least one control signal and programmed to process downloadable executable code, said method of controlling comprising the steps of: (1) receiving at a transmitter station a portion of said downloadable executable code which is effective at a receiver station to perform one of the group consisting of: (a) selecting and receiving a cablecast signal based on one of a presence and absence of a broadcast signal; and

an instruct to-overlay signal are transmitted to said receiver stations, the steps of:

receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations

detecting the presence of said instruct-to-overlay signal at said selected receiver stations at a time when the corresponding overlay is not being displayed, and

coupling said instruct-to-overlay signal to the computers at said selected receiver stations, and

causing the computers at said selected receiver stations to generate and transmit their overlay video signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a combined display at the selected receiver stations consisting of the television program and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.

(b) selecting and receiving a broadcast signal based on one of a presence and absence of a cablecast signal;

(2) transferring said downloadable executable code from said transmitter station to a transmitter;

(3) receiving said at least one control signal at said transmitter station, said at least one control signal operate to execute said downloadable executable code; and

(4) transferring said at least one control signal from said transmitter station to said transmitter, and transmitting an information transmission comprising said downloadable executable code and said at least one control signal.

Claim 14 of the present application is distinct from the second representative claim, claim 3 of U.S. Patent 4,704,725.

Patent 4,704,725, claim 3 claims a method of communicating output signals comprising data and user specific signals at a multiplicity of receiver stations from computers to output devices. At least some of the computers can modify the user specific signals by processing modification control signals. The computers

communicate the data and user specific signals in response to a received and detected instruct-to-transmit signal.

Present application claim 14 is directed to the method of controlling at least one of a plurality of receiver stations each including a receiver, a signal detector, a processor, each plurality of receiver stations adapted to detect at least one control signal and programmed to process downloadable executable code.

Patent claim 3 does not cover present application claim 14. Patent claim 3 relates to the communication of user specific signals. Application claim 14 controlling a plurality of receiver stations each adapted to detect at least one control signal and programmed to process downloadable executable code. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

U.S. patent 4,704,725, claim 3	**Present application, claim 14 (Amended)**
A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device;	A method of controlling at least one of a plurality of receiver stations each including a receiver, a signal detector, a processor, each said plurality of receiver stations adapted to detect at least one control signal and programmed to process downloadable executable code, said method of controlling comprising the steps of: (1) receiving at a transmitter station a portion of said downloadable executable code which is effective at a receiver station to perform one of the group consisting of: (a) selecting and receiving a cablecast signal based on one of a presence and

detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected stations, and
causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.

absence of a broadcast signal; and

(b) selecting and receiving a broadcast signal based on one of a presence and absence of a cablecast signal;

(2) transferring said downloadable executable code from said transmitter station to a transmitter;

(3) receiving said at least one control signal at said transmitter station, said at least one control signal operate to execute said downloadable executable code; and

(4) transferring said at least one control signal from said transmitter station to said transmitter, and transmitting an information transmission comprising said downloadable executable code and said at least one control signal.

Claim 14 of the present application is distinct from the third representative claim, claim 24 of U.S. Patent 4,965,825.

Patent 4,965,825, claim 24 claims a method of generating user specific output information at a multiplicity of receiver stations. Each receiver station is programmed with a special user application and has a computer adapted to generate user specific output information. Each receiver station has an output device to which its computer transmits a user specific signal. At a time when the user specific output information does not exist, an instruct-to-generate signal is transmitted to the receiver stations. In response to the instruct-to-generate signal, the computers generate and transmit to the

output devices the user specific output information in user specific signals which are different, "with each output signal specific to a specific user".

Present application claim 14 is directed to the method of controlling at least one of a plurality of receiver stations each including a receiver, a signal detector, a processor, each plurality of receiver stations adapted to detect at least one control signal and programmed to process downloadable executable code.

Patent claim 24 does not cover present application claim 14. Claim 24 relates to user specific signals sent from the receiver station to an output device. Application claim 14 controlling a plurality of receiver stations each adapted to detect at least one control signal and programmed to process downloadable executable code. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

U.S. patent 4,965,825, claim 24	**Present application, claim 14 (Amended)**
In a method of generating computer output at a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific output information content and user specific signals to one or more associated output devices, with at least one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify said computers' method of processing data and generating output information content, each of said computers, being programmed to accommodate a special user application, the steps of: transmitting an instruct-to-generate signal to said computers at a time when corresponding user specific output	A method of controlling at least one of a plurality of receiver stations each including a receiver, a signal detector, a processor, each said plurality of receiver stations adapted to detect at least one control signal and programmed to process downloadable executable code, said method of controlling comprising the steps of: (1) receiving at a transmitter station a portion of said downloadable executable code which is effective at a receiver station to perform one of the group consisting of: (a) selecting and receiving a cablecast signal based on one of a presence and absence of a broadcast signal; and

information content does not exist, and causing said last named computers to generate their user specific output information content in response to said instruct-to-generate signal, thereby to transmit to each of their associated output devices an output information content and the user specific signal of its associated computer, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.

(b) selecting and receiving a broadcast signal based on one of a presence and absence of a cablecast signal;

(2) transferring said downloadable executable code from said transmitter station to a transmitter;

(3) receiving said at least one control signal at said transmitter station, said at least one control signal operate to execute said downloadable executable code; and

(4) transferring said at least one control signal from said transmitter station to said transmitter, and transmitting an information transmission comprising said downloadable executable code and said at least one control signal.

Claim 14 of the present application is distinct from the fourth representative claim, claim 15 of U.S. Patent 5,109,414

Patent 5,109,414, claim 15 claims a signal processing system which receives data from a data source and outputs the data to a matrix switch and a detector, control signals are detected within the received data and stored for further processing, and a processor controls the directing functions of (1) the matrix switch which receives the data as input and can direct selected portions of the data to a data transmission means and (2) the device which stores and transfers the control signals to the processor.

Present application claim 14 is directed to the method of controlling at least one of a plurality of receiver stations each including a receiver, a signal detector, a processor, each plurality of receiver stations adapted to detect at least one control signal and programmed to process downloadable executable code.

Patent claim 15 does not cover present application claim 14. Patent claim 15 relates to a data system that receives and processes data from a data source and includes a processor that controls the functions of a matrix switch and a storage device. Application claim 14 controlling a plurality of receiver stations each adapted to detect at least one control signal and programmed to process downloadable executable code. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

U.S. patent 5,109,414, claim 15	**Present application, claim 14 (Amended)**
In a signal processing system, a receiver/distribution means for receiving data from a data source and for outputting said data to a matrix switch means and a control signal detector means, a matrix switch means for receiving said data from said receiver/distributor means and for directing selected portions of said received data to a data transmission means, a control signal detector means for detecting control signals respecting said data and transferring said control signals to a storage/transfer means, said control signal means being configured to detect said control signals at a predetermined location within said data, a storage/transfer means for receiving and storing said control signals	A method of controlling at least one of a plurality of receiver stations each including a receiver, a signal detector, a processor, each said plurality of receiver stations adapted to detect at least one control signal and programmed to process downloadable executable code, said method of controlling comprising the steps of: (1) receiving at a transmitter station a portion of said downloadable executable code which is effective at a receiver station to perform one of the group consisting of: (a) selecting and receiving a cablecast signal based on one of a presence and absence of a broadcast signal; and

and for transferring at least a portion of said control signals to a processor means for further processing, and

a processor means for controlling the directing functions of said matrix switch means and the transfer functions of said storage/transfer means based on instructions contained in said control signals.

(b) selecting and receiving a broadcast signal based on one of a presence and absence of a cablecast signal;

(2) transferring said downloadable executable code from said transmitter station to a transmitter;

(3) receiving said at least one control signal at said transmitter station, said at least one control signal operate to execute said downloadable executable code; and

(4) transferring said at least one control signal from said transmitter station to said transmitter, and transmitting an information transmission comprising said downloadable executable code and said at least one control signal.

Claims 3-28 are rejected under the judicially created doctrine of double patenting over the claims of copending U.S. application 08/113,329 and other listed U.S. applications. The rejection should rightfully be a provisional rejection until one or more of the copending applications issues, at which time the rejection can be made non-provisional.

Secondly, although the rejection is stated as a judicially created obviousness double patenting rejection, the examiner's arguments are those of a Schneller non-obviousness, non-statutory double patenting rejection. Applicants' reply brief addresses the merits of the Schneller-type rejection.

The examiner's comments on the claims is acknowledged and appreciated. With respect to the assertion, in paragraph 2, that no attempt to will be made to determine the effective filing date of this application, applicant claims priority under 35 U.S.C. § 120 of the following applications:

Serial No.	Filing Date	Patent No.
08/113,329	August 30, 1993	Pending
08/056,501	May 3, 1993	5,335,277
07/849,226	March 10, 1992	5,233,654
07/588,126	September 25, 1990	5,109,414
07/096,096	September 11, 1987	4,965,825
06/829,531	February 14, 1986	4,704,725
06/317,510	November 3, 1981	4,694,490

Applicants will address the art rejections of this Office Action, but traverse the assertion that a double patenting situation exists.

As to the paragraph numbered 3, applicants acknowledge their duty to maintain a line of patentable demarcation between related applications. Assuming, arguendo, that substantially duplicate claims exist, the applicants intend to make a good faith effort to alert the PTO of any instances in which the PTO treats such claims inconsistently.

As to the paragraph numbered 4, applicants acknowledge and appreciate the examiner's concern over the use of alternative claim language. Applicants assert that they believe that the disclosure supports every possible embodiment or permutation that can be created using said language. During the prosecution of this application, applicants intend to ensure that the disclosure supports each possible embodiment claimed using alternative claims.

In paragraph 10, the Office Action states that "determination of a possible non-statutory double patenting rejection obvious-type in each of the related 327 applications over each other will be deferred until a later time." Applicants submit that the examiner and the PTO cannot defer further rejections to a later time. Every ground of rejection should be made in examiner's first Office Action. 37 CFR § 1.104(a) states that "[o]n taking up an application for examination . . . the examiner shall make a thorough study thereof and shall make a thorough investigation of the available prior art relating to the subject matter of the claimed invention. The examination shall be complete with respect to both compliance of the application . . . with the applicable statutes and rules and to the patentability of the invention as claimed, as well as with respect to matters of form, unless otherwise indicated." The MPEP states "[t]he examiner's action will be complete as to all matters, except that in appropriate circumstances, such as misjoinder of invention, fundamental defects in the application, and the like, the action of the examiner may be limited to such matters before action is made." MPEP § 707.07, citing 37 CFR § 1.105. Finally, "[p]iecemeal examination should be avoided as much as possible. The examiner ordinarily should reject each claim on all valid grounds available . . . ." "Where a major technical rejection is proper, it should be stated with full development of reasons rather than by mere conclusion coupled with some stereotyped expression." MPEP § 707.07(g). Applicants submit that the examiner has a duty to give each application a complete examination, to make rejections with specificity, and that not to defer rejections. For these reasons, applicants likewise traverse the rejection based on the "judicially created doctrine of double patenting over

the claims of copending U.S. application 08/113,329 and the following [list of all applicants copending applications]." Applicants submit that this rejection, even if appropriately made with specificity, should be a provisional double patenting rejection. Applicants respectfully request that this rejection be withdrawn.

As to the grouping of paragraphs numbered 22, applicants acknowledge and appreciate the interviews provided by the PTO. Applicants also appreciate the detailed description of the interviews provided in the Office Action. The Office Action states that "the Group would like to have a complete grouping of applications in a manner that was submitted earlier for only a portion of the total filings." Applicants note that based on the Office Actions received thus far, the PTO does not appear to be following the groupings applicants submitted previously. The order of examination of applicants' applications do not seem to have any correspondence to the groupings previously submitted. Applicants, therefore, will not supply further groupings. Applicants will, however, gladly supply further groupings if requested by the PTO for the purpose of following these groupings. Mr. Groody has confirmed in a telephone conversation between Mr. Groody and Mr. Scott that no more groupings need be sent.

In the interest of maintaining a clear record, applicants respectfully traverse the Office Action's interview summary statement that an offer was made to terminally disclaim the present application with the '81 or '87 patents. Rather, applicants respectfully submit that their offer was to disclaim a block of copending applications against one another, provided their issue date was in close enough proximity so as not to result in unnecessarily great losses in patent term duration.

CONCLUSION

In accordance with the foregoing it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. Further, that all pending claims patentably distinguish over the prior art, taken in any proper combination. Thus, there being no further outstanding objections or rejections, the application is submitted as being in a condition for allowance, which action is earnestly solicited.

If the Examiner has any remaining informalities to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for telephone interview to discuss resolution of such informalities.

Respectfully submitted,

Reg # 32,680

Date: July 2, 1997

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